

On approval of the rules for providing audiological care to the population of the Republic of Kazakhstan

Unofficial translation

Order of the Minister of Health of the Republic of Kazakhstan dated December 21, 2020 No. KP DSM-306/2020. Registered with the Ministry of Justice of the Republic of Kazakhstan on December 22, 2020 No. 21849

Unofficial translation

In accordance with subparagraph 83) of article 7 of the Code of the Republic of Kazakhstan dated July 7, 2020 On Public Health and Health Care System I hereby ORDER:

- 1. Approve the attached rules for providing audiological care to the population of the Republic of Kazakhstan.
- 2. Invalidate Order No. 338 of the Minister of Health and Social Development of the Republic of Kazakhstan dated May 12, 2015 "On approval of the Rules for providing audiological care to the population of the Republic of Kazakhstan" (registered in the Register of State Registration of Regulatory Legal Acts under No. 11406, published in the legal information system "Adilet" July 3, 2015).
- 3. The Department for organization of medical aid of the Ministry of Healthcare of the Republic of Kazakhstan, in accordance with the procedure established by the legislation of the Republic of Kazakhstan, shall:
- 1) provide the state registration of this order with the Ministry of Justice of the Republic of Kazakhstan;
- 2) post this order on the Internet resource of the Ministry of Healthcare of the Republic of Kazakhstan after its official publication;
- 3) within ten working days after the state registration of this order, report to the Legal Department of the Ministry of Healthcare of the Republic of Kazakhstan on execution of the actions provided for in subparagraphs 1), 2) of this paragraph.
- 4. Control over the execution of this order shall be assigned to the supervising Vice Minister of Healthcare of the Republic of Kazakhstan.
- 5. This order shall be enforced upon expiry of ten calendar days after the date of its first official publication.

Minister of Healthcare of the Republic of Kazakhstan

A. Tsoi

"AGREED"

Ministry of Education and Science of the Republic of Kazakhstan

by order No. KR DSM-306/2020 of the Minister of Healthcare of the Republic of Kazakhstan of December 21, 2020

Rules for providing audiological care to the population of the Republic of Kazakhstan

Chapter 1. General Provisions

- 1. These Rules for providing audiological care to the population of the Republic of Kazakhstan (hereinafter the Rules) have been developed in accordance with subparagraph 83) of Article 7 of the Code of the Republic of Kazakhstan dated July 7, 2020 On Public Health and Health Care System and define the procedure for providing audiological care to the population of the Republic of Kazakhstan.
 - 2. The following concepts shall be used in these Rules:
- 1) connecting an audio (speech) processor determining the primary tuning parameters 4-8 weeks after the operation;
- 2) universal audiological screening annual detection in PHC organizations of hearing impairments in all young children (under three years old) and at the age of six by the method of recording evoked otoacoustic emission, evoked short-latent auditory potentials and tympanometry;
- 3) universal neonatal audiological screening early detection of hearing impairment in newborns in obstetric organizations during the first three days of a child's life by the method of recording evoked otoacoustic emission and short-latent auditory potentials;
 - 4) child a person who has not reached the age of eighteen (majority);
- 5) tuning session a period lasting from two working days to four working days, during which the speech processor of the CI system is adjusted;
- 6) validation checking the adequacy of the tuning of the hearing device and the audio (speech) processor using surdopedagogic methods;
- 7) verification checking the adequacy of the adjustment of the hearing aid by measuring the difference in decibels between the level of the sound signal transmitted to the real ear and the similar signal calculated in the coupler (hereinafter RECD)- Real Ear To Coupler Difference;
 - 8) healthcare organization a legal entity carrying out activities in healthcare;
- 9) bimodal hearing prosthetics with hearing devices using a hearing aid on one ear and an implantation system on the other;
- 10) hospitalization bureau portal (hereinafter -the Portal) a unified system of electronic registration, accounting, processing and storage of patient referrals for hospitalization in a

hospital within the guaranteed volume of free health care (hereinafter –GVFHC) and compulsory social health insurance - CSHI;

- 11) early deaf (pre-lingual) patients patients who lost their hearing before development of speech and language. In this group, perilingual children are distinguished patients who lost their hearing during the development of speech and language (at the age of 2-7 years);
- 12) hearing device an electro-acoustic device consisting of a microphone, amplifier-converter and telephone (speaker) of air or bone conduction;
- 13) auditory prosthetics aid services in the issuance, purchase and replacement of a hearing device, audio (speech) processor services carried out within the framework of GVFHC and CSHI;
- 14) hearing prosthetics with a hearing device selection of the model of the device, production of an individual earmold, optimal adjustment in accordance with the audiometry parameters, verification and validation;
 - 15) binaural hearing prosthetics with hearing devices- hearing devices for both ears;
 - 16) monaural hearing prosthetics hearing aid for one ear;
- 17) audiological (in-depth) hearing examination the use of subjective and objective methods for diagnosing auditory function in order to determine the type and degree of hearing impairment;
- 18) hearing prosthetics room a structural unit established at an audiological center or department (office) or as an independent legal entity (including with a private form of ownership);
- 19) hearing prosthetist- a specialist with a secondary medical or secondary or higher technical education, specializing in optimal selection and adjustment of a hearing device, tuning of audio (speech) processor, also making the necessary examination, measurements, and instruction of patients with hearing impairment;
- 20) hearing prosthetics restoration of a person's communication capabilities through the use of medical devices that compensate for hearing impairment (hearing device, middle ear implantation systems, bone conduction, cochlear implantation, and others);
- 21) hearing prosthetics by implantation method implantation of a hearing implant into the inner, middle ear or temporal bone in order to restore the auditory sensation, as well as postoperative adjustments of the audio (speech) processor. Implant systems consist of an internal part an implant and an external part an audio (speech) processor;
- 22) late-deaf (post-lingual) patients patients (children, adolescents and adults) who lost their hearing after development of speech;
- 23) consultative and diagnostic audiological care specialized medical care, including with the use of high-tech medical care (hereinafter -HTMC) without round-the-clock medical supervision;
- 24) cochlear implantation system (hereinafter -CI system) a system that performs the functions of damaged or missing hair cells and provides electrical stimulation of nerve fibers;

- 25) short-latency auditory evoked potentials bioelectric potentials arising in different structures of the auditory system, mainly in the brain stem, in response to a sound stimulus and recorded from the surface of the head;
- 26) specialized medical care assistance provided by specialized professionals for diseases requiring special methods of diagnosis, treatment, medical rehabilitation, including using the means of remote medical services;
- 27) medical information system an information system that provides management of health care subjects' processes in electronic format;
- 28) joint commission for medical services quality a permanent consultative and advisory body under the authorized body, whose purpose is to develop recommendations for improving standardization, clinical protocols, standards for the quality control system and availability of health services, as well as accreditation of subjects in accordance with Article 25 of the Code (hereinafter JCQ);
- 29) compulsory social health insurance (hereinafter -CSHI) is a set of legal, economic and organizational measures for the provision of medical care to medical services consumers at the expense of compulsory health insurance fund assets;
- 30) middle ear implantation system a system that is conductive to sounds transformation directly into the oscillations of the ossicular chain of the middle ear;
- 31) psychological, medical and pedagogical consultation (hereinafter PMPC) an organization of special education that carries out psychological, medical and pedagogical examination and counseling on training and education;
- 32) psychological and pedagogical correction office, a rehabilitation center organizations of special education that provide comprehensive psychological, medical and pedagogical assistance to children with disabilities;
- 33) re-screening re-examination of hearing with the aim of early detection of its impairment in the first 10-30 days of a child's life in healthcare organizations providing primary health care (hereinafter PHC) by the method of recording, evoked otoacoustic emission and short-latent auditory evoked potentials;
- 34) tuning of the speech processor determining the audibility thresholds and the most comfortable sound volume levels on each channel of the CI system, choosing a speech coding strategy, creating individual listening programs;
- 35) bone conduction implantation system sound transmission system based on the principle of direct bone conduction;
- 36) audiological care a set of medical services aimed at prevention, timely detection, diagnosis, treatment, hearing prosthetics aid for persons with hearing impairments, provided in consultative and diagnostic, inpatient or hospital-replacement conditions;
- 37) a surdology center or department (office) a structural unit of a healthcare organization established in healthcare organizations providing primary health care, in a mono-multifield clinic or as an independent legal entity (including with a private form of

ownership) providing medical care to adults and (or) children on audiological examination, solving hearing aid issues, the need for hearing-improving operations, putting on dispensary records, as well as providing surdopedagogic care;

- 38) tympanometry (impedansometry) measurement of acoustic resistance when the air pressure changes in the external auditory canal to assess the condition of the middle ear, the degree of mobility of the tympanic membrane (eardrum) and conductivity of the auditory ossicles;
- 39) evoked otoacoustic emission a very faint sound that occurs and is recorded in the external auditory canal as a result of the contraction of the outer hair cells of the cochlea in response to an audible signal.
 - 3. State surdology centers or departments (offices) shall be opened on the basis of: one office per sixty thousand child population; one office per one hundred thousand of adult population.
- 4. Surdology center or department (office) shall be provided with the necessary equipment in accordance with Appendix 1 to these Rules.
- 5. Staffs and staffing standards of surdology centers or departments (offices); hearing prosthetics rooms, positions of medical and pedagogical personnel shall be established in accordance with Appendix 2 to these Rules.
- 6. Organizations providing consultative and diagnostic audiological care, hearing prosthetic aid, shall be accommodated in the premises in accordance with <u>Appendix 3</u> to these Rules. All specialists' offices, as well as rooms for hearing diagnostics, shall be equipped with soundproof doors and windows.
- 7. Specialists of a surdology center or department (office); hearing prosthetics rooms, shall provide audiological care in compliance with the standards of reception time per patient according to Appendix 4 to these Rules.

Chapter 2. Procedure for audiological care to the population

8. Audiological care to the population of the Republic of Kazakhstan shall be provided in stages:

the first stage - audiological screening;

the second stage - in-depth examination of hearing;

the third stage - hearing prosthetics aids (medical rehabilitation);

the fourth stage - correctional and developmental training;

the fifth stage - replacement of medical devices that compensate for hearing impairment.

9. Audiological screening shall comprise universal neonatal audiological screening, re-screening, universal audiological screening of young children (under three years old inclusive) and preventive examination of children aged six to seven.

- 10. Newborns in the first day of life in obstetric organizations shall undergo universal audiological screening by the method of recording, evoked otoacoustic emission and short-latency auditory evoked potentials by a specially trained nurse.
- 11. In the obstetric care organization (regardless of the ownership form), the newborn shall be assigned an individual number with the entry of the examination results in the medical information system.
- 12. Re-screening shall be carried out in the child development room of the primary health care organization by the method of recording, evoked otoacoustic emission, short-latency auditory evoked potentials and tympanometry within ten to thirty days of the child's life.
- 13. Annually, in the primary health care organization, universal audiological screening of young children (under three years old inclusive) shall be carried out by the method of recording, evoked otoacoustic emission, short-latency auditory evoked potentials and tympanometry.
- 14. Preventive examination of children aged six to seven shall be carried out in the child's development room by the method of recording, evoked otoacoustic emission, short-latency auditory evoked potentials and tympanometry with transmission of the examination results to otorhynolaryngologists, pediatricians and (or) general practitioners at the attachment place of the child.

If hearing impairments are detected, specialists in the child's development room and otorhynolaryngologists, pediatricians and (or) general practitioners shall refer the child to a surdology center or department (office) for an in-depth hearing examination, as well as to psychological, medical and pedagogical consultations for counseling and referral to psychological and pedagogical correction rooms, rehabilitation centers, preschool organizations of a general or special type.

- 15. In-depth (audiological) examination of hearing shall be carried out in surdology centers or departments (offices) in order to determine the type and degree of hearing impairment using subjective and objective diagnostic methods, to refer timely for treatment and (or) correction of auditory function.
- 16. Determination of the degree of hearing loss shall be carried out in accordance with the following classification:

I degree of hearing loss (mild) - average hearing loss of 26 - 40 decibels;

II degree of hearing loss (average) - average hearing loss of 41 - 55 decibels;

III degree of hearing loss (moderate) - average hearing loss of 56 - 70 decibels;

IV degree of hearing loss (severe) - average hearing loss of 71 - 90 decibels;

deafness - an average hearing loss of more than 90 decibels.

- 17. At any stage of screening, specialized professionals shall refer to surdology center or department (office) for audiological examination:
- 1) newborns who were for health reasons in the intensive care for more than five calendar days;

- 2) premature babies;
- 3) newborns and young children (under three years old) who have a "failed" audiological screening test result;
- 4) children and adults with suspicions of hearing impairment and (or) risk factors for development of hearing loss;
 - 5) children and adults with pathology of the hearing and speech organs.
- 18. Basing on results of the audiological examination of the auditory function in children and adults, specialists of the surdology center or department (office), depending on the type and degree of hearing impairment, shall recommend specialized medical care and (or) hearing prosthetics, as well as correctional and developmental training.
- 19. If the specialists of the surdology center or department (office) detect a reversible hearing impairment, the patient shall be referred to an otorhinolaryngologist for treatment in accordance with the clinical protocols for diagnosis and treatment of the otorhinolaryngological profile, also clinical guidelines recommended by the JCQ.
- 20. If an irreversible hearing impairment is detected by specialists of the surdology center or department (office), the patient shall be referred to the following organizations:

for hearing aid to hearing prosthetics offices (public or private) and (or) healthcare organizations that provide HTMC for middle ear implantation, bone conduction implants and cochlear implantation in accordance with the indications;

for registration of a disability group in health care entities that provide primary health care, in case of detection of bilateral hearing impairment of III, IV degrees and deafness;

to the territorial PMPC to organize the child's educational route;

for dynamic observation by an otorhinolaryngologist, general practitioner, therapist, pediatrician at the place of attachment of the patient.

21. Patients (children) after prosthetic repair shall be referred to the territorial PMPC for psychological and pedagogical examination. Psychological, medical and pedagogical consultations, depending on the developmental characteristics and potential capabilities of children, shall give referrals for correctional and developmental education.

Correctional and developmental training shall be carried out in educational institutions: in the psychological and pedagogical correction offices of (PPCO), rehabilitation centers, children's preschool organizations of general or special type. Adult patients shall be referred by an audiologist to classes with a surdologist in surdology centers or departments (offices).

- 22. Replacement of medical devices that compensate for hearing impairment shall be carried out in accordance with Resolution No. 754 of the Government of the Republic of Kazakhstan dated July 20, 2005 "On approval of the list of technical supportive (compensatory) means and special vehicles provided to disabled people."
- 23. All data on the patient shall be entered in the electronic medical information system and transmitted to the psychological and medical pedagogical consultations.

Chapter 3. Hearing prosthetic with hearing devices

- 24. Hearing prosthetics shall be carried out after an audiological examination of hearing upon the conclusion of an orhinolaryngologist (surdologist).
 - 25. Hearing prosthetics shall include:
- 1) audiological examination of hearing and conclusion of an otorhinolaryngologist (surdologist) on the need for hearing aid prosthetics;
- 2) recommendation of monaural, binaural or bimodal hearing prosthetic aid in case of irreversible hearing loss with hearing thresholds on air and bone conduction of more than 30 decibels;
- 3) determination of the optimal type of hearing device: by the method of sound conduction (air or bone conduction), by the place of wearing (behind-the-ear type, intra-ear type, bone conduction device).
 - 26. General indications for hearing prosthetics shall be:
- 1) for adults and children of all ages irreversible hearing impairment in the range of speech frequencies with hearing thresholds for air and bone conduction of more than 30 decibels, the treatment of which with medicinal and surgical methods is impossible, ineffective or not indicated for medical reasons;
- 2) for young children diagnosed with severe or profound hearing loss, hearing aid prosthetics shall be used as a trial rehabilitation to determine the effectiveness and feasibility of cochlear implantation;
- 3) for adults and children after unilateral cochlear implantation hearing prosthetics for a non-implanted ear (bimodal hearing aids).
- 27. At hearing prosthetics by air conduction devices for children and adults, the following shall be indicated:
- 1) binaural hearing prosthetics with modern digital hearing devices of the same family for bilateral symmetric or asymmetric conductive, sensorineural or mixed hearing loss with an average hearing threshold of 30 90 decibels (at frequencies of 500, 1000 and 2000 Hertz);
- 2) monaural hearing prosthetics for the better hearing ear with modern digital hearing aids for bilateral asymmetric conductive, sensorineural or mixed hearing loss with a significant difference in hearing loss on the right and left ear (at least 30 decibels);
- 3) monaural hearing prosthetics with modern digital hearing devices for unilateral conductive, sensorineural or mixed hearing loss with an average hearing threshold of up to 90 decibels (provided that hearing is preserved in the other ear);
- 4) bimodal hearing prosthetics with modern digital hearing devices tuned to the contralateral ear in unilateral prosthetics with a cochlear implant and conductive, sensorineural or mixed hearing loss with average hearing thresholds of 30 90 decibels (at frequencies of 500, 1000 and 2000 Hertz) in the other ear.

- 28. Hearing replacement with bone conduction hearing devices for children and adults shall be indicated in the following cases:
- 1) inability to use an air conduction hearing device due to malformations of the outer and middle ear, chronic otitis media and other diseases;
 - 2) inability to install a bone implantation system due to anatomical features (childhood);
- 3) bilateral or unilateral conductive and mixed hearing loss with average hearing thresholds of under 45 decibels in bone conduction;
 - 4) atresia of the external auditory canal, microtia;
- 5) unilateral sensorineural deafness caused by sudden hearing loss, trauma, removal of acoustic neuroma, severe forms of Meniere's disease.
- 29. Hearing replacement for children shall be carried out only with programmable and digital hearing aids.
- 30. Hearing replacement for term infants with congenital hearing loss shall be carried out when they are four to six months old, for premature infants at six to eight months, for children with hearing (auditory) neuropathy no earlier than one year old.
- 31. Clarification of the tuning parameters of hearing devices of children shall be carried out in the following terms:
 - 1) repeatedly a month after the initial tuning up;
 - 2) every two to three months during the first year of the child's life;
 - 3) every four to six months until the age of five;
 - 4) annually after five years old.
 - 32. In the hearing prosthetics room the following procedure shall be performed:
- 1) audiological examination of hearing and its assessment as sufficient for hearing aids, if necessary conducting additional examinations or studies in dynamics;
 - 2) selection and adjustment of the hearing device, verification and validation;
- 3) production of an individual earmold when using an air conduction hearing aid, with substantiation for the choice of material and design features of the earmold, parameters of the valve opening;
- 4) manufacturing of an in-ear hearing aid with substantiation of the choice of material and design features of the external auditory canal;
- 5) fine tuning of the hearing aid, taking into account the degree of adaptation and determining the operation mode;
 - 6) classes on adaptation to new acoustic conditions of a child and an adult;
 - 7) warranty and subsequent post-warranty service and maintenance.
- 33. The criterion for the effectiveness of selection and adjustment of the hearing aid shall be the results of verification by measuring the output signal in a real ear, conducting tonal threshold and speech audiometry in a free sound field with and without a hearing aid, and validation.

- 34. After hearing prosthetics, the patient's data shall be entered into the medical information system, indicating the kind of hearing aid (binaural, monaural or bimodal), model , type (air or bone), type of individual earmolds, data of the tuning sessions, measurement results of the output signal by measuring the output signal in the real ear.
- 35. If a patient who needs hearing prosthetics has a disability group for any disease, he shall be provided at the expense of budgetary funds once every 4 years in hearing prosthetics rooms in accordance with the Rules for Provision of Prosthetic and Orthopedic Aid to Disabled Persons and Technical Auxiliary (Compensatory) Means approved by Order No. 26 of the Minister of Health and Social Development of the Republic of Kazakhstan dated January 22, 2015 "On some issues of rehabilitation of disabled persons" (registered in the Register of State Registration of Regulatory Legal Acts under No. 10370, published on March 26, 2015 in the legal informationl system "Adilet") (hereinafter Order No. 26).
- 36. If the patient does not have a disability group for any disease, the hearing aids shall be acquired at the patient's own expense in the hearing prosthetics offices.
- 37. Hearing prosthetics offices shall provide a selection of hearing devices from at least three manufacturers.
- 38. Hearing aids replacement for patients with a disability group for any disease shall be carried out at the appointed time in the hearing prosthetics office that issued them in accordance with Order No. 26.
- 39. Replacement or acquisition of a hearing device for patients who do not have a disability group for any disease shall be carried out in a hearing prosthetics office at their own expense.

Chapter 4. Hearing prosthetics with middle ear implantation and bone conduction systems

- 40. Determination of indications and referral to health care organizations that provide HTMC on hearing aids for middle ear implantation systems and (or) bone conduction shall be carried out upon the conclusion of a doctor specializing in otorhinolaryngology (surdology) (adult or pediatric) of a surdology center or department (office) in accordance with clinical protocols for diagnosis and treatment of otorhinolaryngological profile, as well as clinical guidelines recommended by the Joint Commission for the Quality of Medical Services.
- 41. In the absence of a specialized professional in a medical organization, a referral for clarifying the indications for middle ear implantation and (or) bone conduction shall be issued by a pediatrician, general practitioner, or neuropathologist.
- 42. Hearing prosthetics with middle ear implantation and bone conduction systems shall include:

medical stage, consisting of a preoperative examination and clarification of indications, surgery, connecting an audio (speech) processor and its subsequent tuning during the entire rehabilitation period;

pedagogical stage, consisting of correctional and developmental assistance to children with hearing impairments in organizations of special education on referral of the territorial PMPC.

- 43. Medical indications for hearing prosthetics with a middle ear implantation system shall be:
- 1) bilateral conductive or mixed hearing loss in congenital ear anomalies, tympanosclerosis, otosclerosis, adhesive disease of the middle ear, as well as post-surgical treatment on the middle ear, lack of hearing improvement after hearing improvement surgeries;
- 2) hearing loss at thresholds of bone conduction at 500 Hertz not more than 55 decibels, at high frequencies no more than 75 decibels;
 - 3) speech intelligibility over 50% at 65 decibels;
- 4) presence of conductive or mixed hearing loss after surgical treatment in the middle ear or anomalies in the development of the middle ear with bone conduction thresholds of 500 Hertz no more than 55 decibels and at high frequencies no more than 75 decibels;
- 5) experience of using an air conduction hearing aid and dissatisfaction with their prolonged wearing (except for children with congenital anomaly of the external auditory canal);
 - 6) stability of auditory function for 24 months;
 - 7) absence of exacerbation of the inflammatory process in the middle ear for 24 months.
- 44. Medical contraindications for hearing prosthetics with a middle ear implantation system shall be:
- 1) pronounced sensorineural (neurosensory) component of hearing loss with an increase in hearing thresholds with bone sound conduction more than 55 decibels per 500 Hertz, at high frequencies more than 75 decibels;
- 2) low percentage of speech intelligibility (speech intelligibility less than 50% at a sound intensity of 65 decibels);
- 3) spontaneous vestibular disorders (endolymphatic hydrops, posttraumatic labyrinthopathy, extra-labyrinthine hearing impairment, vertebrobasilar circulatory disorders);
 - 4) recurrence of cholesteatoma or purulent-carious process in the tympanic cavity;
- 5) presence of acute or severe somatic pathology (acute respiratory tract diseases, acute infectious diseases, severe oligotrophy, post-vaccination state (less than ten to fourteen days), hyperthermia of an unclear nature, acute renal failure, chronic renal failure, severe decompensated or subcompensated congenital development defects, tuberculosis, shock and collapse, liver and kidney diseases, severe anemia with a hemoglobin level of less than 80 g / l, generalized convulsions of various etiologies, malignant neoplasms (stage III-IV),

respiratory failure of more than III degree, diseases in decompensation stage, uncorrected metabolic diseases, active rheumatic process of the 2nd degree and higher, presence of hormonal therapy, purulent skin diseases, infectious skin diseases (scabies, fungal diseases and others), diabetes mellitus, blood diseases, severe allergic and autoimmune diseases;

- 6) presence of mental and gross neurological disorders that impede the use of the implant and the audio (speech) processor and the conduct of specially organized corrective psychological and pedagogical work (corrective and developmental assistance) with patients with hearing impairments in the organization of general and special education or in surdology offices of mental health illness with desocialization of personality with codes of the international classification of diseases of 10th revision: F00, F02, F03, F05, F10 29, F63, F72 F73;
 - 7) retrocochlear pathology.
- 45. Medical indications for hearing prosthetics with a bone conduction implantation system shall be:
 - 1) bilateral conductive or mixed hearing loss in congenital anomalies of the ear;
 - 2) lack of hearing improvement after hearing-improving operations;
- 3) hearing loss at thresholds of bone sound conduction at 500 Hertz no more than 55 decibels, at high frequencies no more than 75 decibels;
 - 4) speech intelligibility over 50% at 65 decibels;
- 5) presence of conductive or mixed hearing loss after surgical treatment in the middle ear or anomalies in the development of the middle ear with bone conduction thresholds of 500 Hertz no more than 55 decibels and at high frequencies no more than 75 decibels;
- 6) experience of using an air conduction hearing device and dissatisfaction with its prolonged wearing (except for children with congenital anomaly of the external auditory canal);
 - 7) stability of auditory function for 6 months;
 - 8) absence of exacerbation of the inflammatory process in the middle ear for 6 months.
- 46. Medical contraindications for hearing prosthetics with a bone conduction implantation system shall be:
 - 1) insufficient bone volume and poor quality of bone tissue;
 - 2) diseases that prevent osseointegration with bone tissue (osteoporosis and others);
- 3) decompensated diseases that prevent normal wound healing (streptoderma, diabetes mellitus, and others);
- 4) presence of mental and gross neurological disorders (mental illness with personality desocialization with codes according to the international classification of diseases of 10th revision: 1 F00; F02; F03; F05; F10 F29; F63; F72 F73);
- 5) a pronounced sensorineural component of hearing loss with an increase in hearing thresholds with bone sound conduction more than 55 decibels per 500 Hertz, at high frequencies of more than 75 decibels;

- 6) low percentage of speech intelligibility (speech intelligibility less than 50% at a sound intensity of 65 dB);
- 7) spontaneous vestibular disorders (endolymphatic hydrops, post-traumatic labyrinthopathy, extra-labyrinthine hearing impairment, vertebrobasilar circulatory disorders);
- 8) presence of acute or severe somatic pathology (acute respiratory tract diseases, acute infectious diseases, severe hypotrophy , condition after vaccination (less than 10-14 days), hyperthermia of an unclear nature, acute renal failure, chronic renal failure, severe decompensated or subcompensated congenital defects development, tuberculosis, shock and collapse, liver and kidney diseases, severe anemia with hemoglobin levels less than 80 g / l, generalized convulsions of various etiologies, malignant neoplasms (stage III-IV) (international classification of diseases 10th revision), respiratory failure more than III degree, (international classification of diseases of 10th revision,) diseases in decompensation stage, uncorrectable metabolic diseases, activity of the rheumatic process of 2 degree and higher, presence of hormonal therapy, purulent skin diseases, infectious skin diseases (scabies, fungal diseases and others), diabetes mellitus, blood diseases, severe allergic and autoimmune diseases;
 - 9) retrocochlear pathology.
- 47. Preoperative examination and clarification of indications shall be carried out by a commission (hereinafter referred to as the Commission) in healthcare organizations that provide HTMC for middle ear implantation and (or) bone conduction.
- 48. The composition of the commission shall be approved by the head of the healthcare organization providing HTMC for middle ear implantation and (or) bone conduction.
- 49. The head of the healthcare organization providing HTMC on middle ear implantation and (or) bone conduction, or his deputy for clinical work shall be appointed the chairman of the commission.
- 50. The Commission shall include professionals from a healthcare organization that provides HTMC for middle ear implantation, having appropriate training and qualifications in this area: doctors specializing in otorhinolaryngology (audiology) (adult or pediatric), otorhinolaryngology (adult or pediatric), "Pediatrics" or "therapy", "radiology", "anesthesiology and resuscitation (adult or pediatric)", sign language teacher.
- 51. Hearing prosthetics with middle ear implantation or bone conduction systems for children shall be carried out only at the written consent of the parents or legal representatives of the child to participate in postoperative hearing and speech rehabilitation.
- 52. In a healthcare organization providing HTMC on middle ear implantation and (or) bone conduction, a waiting list shall be formed of patients in the sequence of applications for this type of medical care, assigning a number and issuing a written notification within three working days after the decision is made.
- 53. The patient shall be further referred to the clinic at the place of attachment for registration on the portal "Hospitalization Bureau" (hereinafter the Portal)

- 54. In the event of a written refusal of the patient (if the patient is a child, then his parents or legal representatives) from the operation, his number on the waiting list shall be lost.
- 55. If an acute inflammatory process or other relative contraindications (trauma, poisoning , etc.) are revealed in a patient preparing for surgical treatment, the operation shall be postponed to a later date with the issuance of an information sheet.
- 56. The extract from the medical history shall contain the names of the manufacturer of the implantation system, implant and audio (speech) processor.
- 57. Not earlier than 8 weeks after the operation, the audio (speech) processor of the middle ear implantation system shall be connected with a tuning session performed on an outpatient basis.
- 58. In the first year after the installation of the middle ear or bone conduction implantation system, the audio (speech) processor shall be adjusted at least 4 times, in the second year at least 2 times, in subsequent years as necessary for the patient.
- 59. After hearing prosthetics with a middle ear or bone conduction implantation system, patients shall be referred to correctional and developmental assistance (training) in the general or special education organization through the territorial PMPC.
 - 60. Parents and (or) legal representatives of the child shall:
- 1) prepare the child for the procedure of connecting and tuning of the audio (speech) processor of the implanted system in accordance with the recommendations of the surdologist and sign language teacher;
- 2) provide optimal conditions to the child for the development of hearing, understanding and own speech;
 - 3) ensure constant use by the child of the audio (speech) processor;
 - 4) create a speech environment at home;
- 5) contact within five days the territorial PMPC at the place of residence for specially organized correctional and developmental assistance (training) in general or special education organizations;
 - 6) ensure study of the guidelines for using the implantable system;
 - 7) timely contact the organizations that provide warranty and post-warranty service;
 - 8) timely provide consumables (batteries, magnets, etc.) at their own expense.

Chapter 5. Hearing prosthetics with cochlear implantation system

61. Determination of indications and referral to health care organizations providing HTMC on hearing prosthetics with a cochlear implantation system (carried out upon conclusion of a doctor in the field of "otorhinolaryngology (audiology) (adult or pediatric)" of a surdology center or department (office), in accordance with the clinical protocols of diagnosis and treatment of otorhinolaryngological profile, as well as clinical guidelines recommended by the Joint Commission for the health services quality.

- 62. In the absence of a specialized professional in a medical organization, a referral for clarification of indications for cochlear implantation to medical organizations providing HTMC shall be issued by a pediatrician, general practitioner, or neuropathologist.
- 63. Hearing prosthetics with cochlear implantation system a system of measures, shall include:
 - 1) medical stage:

preoperative examination and clarification of indications for cochlear implantation; surgical operation on cochlear implantation;

connection of an audio (speech) processor and its subsequent tunings throughout the entire rehabilitation period;

2) pedagogical stage:

specially organized correctional and developmental training for patients with hearing impairments in general and special education organizations through the territorial PMPC at his place of residence or in audiology offices.

- 64. Medical indications for cochlear implantation for adult population shall be:
- 1) bilateral post-lingual deafness (more than 10 years);
- 2) IV degree bilateral sensorineural hearing loss;
- 3) low efficiency of hearing prosthetics (hearing thresholds in hearing aids in a free sound field in the range of 500 4000 Hertz are 55 decibels or more, the intelligibility of polysyllabic words less than 40%, monosyllabic words less than 20%, the presence of a positive dynamics in the development of auditory reactions only to non-speech sounds after 6 months of constant use of the hearing aid, lack of dynamics of speech development, provided it is constantly worn);
- 4) unilateral sensorineural hearing loss with pronounced tinnitus in the deaf ear, which is not compensated by other hearing aids or bone implants.
 - 65. Medical indications for cochlear implantation for children shall be:
 - 1) bilateral sensorineural hearing loss of IV degree;
 - 2) bilateral deafness;
 - 3) auditory neuropathy in the event of ineffectiveness or low efficiency of hearing aid;
- 4) low efficiency of hearing prosthetics with hearing devices (the hearing thresholds in a hearing device in a free sound field in the range of 500-4000 Hz are 55 decibels or more; intelligibility of polysyllabic words -less than 40%, monosyllabic less than 20%; presence of a positive dynamics in the development of auditory reactions only to non-speech sounds after 6 months; lack of dynamics of speech development, provided it is constantly used).
 - 66. Medical contraindications for cochlear implantation for children and adults shall be:
 - 1) retrocochlear pathology, except for auditory neuropathy;
- 2) complete or significant ossification of the cochlea in the absence of the possibility of injecting a chain of electrodes;

- 3) presence of acute or severe somatic pathology (acute respiratory tract diseases, acute infectious diseases, severe malnutrition, post-vaccination state (less than 10-14 days), hyperthermia of an unclear nature, acute renal failure, chronic renal failure, severe decompensated or subcompensated congenital development defects, tuberculosis, shock and collapse, liver and kidney diseases, severe anemia with hemoglobin levels less than 80 g / l, generalized convulsions of various etiologies, malignant neoplasms (stage III-IV), respiratory failure of more than III degree, diseases in the stage of decompensation, uncorrected metabolic diseases, activity of the rheumatic process of the 2nd degree and higher, presence of hormonal therapy, purulent skin diseases, infectious skin diseases (scabies, fungal diseases and others);
- 4) presence of mental and gross neurological disorders (epilepsy, epileptic readiness, mental illness with personality desocialization with ICD of 10th revision codes F00, F02, F03, F05, F10 29, F63, F72 F73.
 - 67. surdology-pedagogical indications for carrying out CI operation for patients shall be: Children under the age of two:
- 1) presence of involuntary unconditioned orienting reactions to low-frequency, mid-frequency and high-frequency non-speech sounds at a distance of less than 3 meters or their absence;

Children over two years old:

- 2) presence of a conditioned reflex motor reaction (hereinafter CRMR) to low-, mediumand high-frequency non-speech sounds (drum, pipe, whistle or bell) at a distance of less than 3 meters;
- 3) perception of speech sounds using CMR in low-frequency ([U-U-U]), mid-frequency ([PA-PA-Pa]), high-frequency ([Z] and [I-I-I]) ranges at a distance of no more 1 meter;
- 4) presence of CMR for the voice of the speaking volume, in its absence for the voice of increased volume.
 - 5) the state of auditory perception in hearing devices:

for children who can speak, speech intelligibility in the hearing device of polysyllabic words in the list - less than 40%, monosyllabic words - less than 20% in a closed or open choice;

- 6) presence of a positive dynamics in the development of auditory reactions only to non-speech sounds, absence of dynamics of speech development, provided that the hearing aid is constantly used for six months in conditions of specially organized correctional and developmental assistance.
- 68. Preoperative examination and clarification of indications shall be carried out by a commission (hereinafter referred to as the Commission) in healthcare organizations that provide HTMC on hearing aids with cochlear implantation system
- 69. The composition of the Commission shall be approved by the head of the healthcare organization that provides HTMC on hearing aids with cochlear implantation system.

- 70. The head of the healthcare organization providing HTMC on hearing aids with cochlear implantation system or his deputy for clinical work shall be appointed the chairman of the Commission.
- 71. The Commission shall include professionals from a healthcare organization that provides HTMC in hearing aids with cochlear implantation system, having appropriate training and qualifications in this field: doctors specializing in otorhinolaryngology (audiology) (adult or pediatric), otorhinolaryngology (adult or children's), "Neuropathology (adult or pediatric)", "pediatrics" or "therapy", "radiology", "anesthesiology and resuscitation (adult or children)", sign language teacher, psychologist, logopaedist.
- 72. Clarification of indications for cochlear implantation shall be carried out on the basis of audiological, radiological, surdopedagogic, logopedic, psychiatric, general and special clinical examinations and, if available, taking into account the conclusion of the hearing prosthetics office and the conclusion on the socio-psychological readiness of the patient and his family for postoperative rehabilitation.
- 73. When determining the indications for the cochlear implantation operation, a doctor specializing in otorhinolaryngology (audiology) (adult or pediatric) in the surdology office shall refer patients to healthcare organizations that provide HTMC on hearing aids with cochlear implantation system, to clarify the indications for surgical treatment.
 - 74. Audiological examinations shall be carried out for:
 - 1) determining the type of hearing impairment and the degree of its loss;
 - 2) assessing the auditory nerve safety;
 - 3) evaluating the effectiveness of hearing aids.
- 75. For audiological examination of a patient for cochlear implantation, the following actions shall be performed:
 - 1) collection of anamnesis and otological examination;
- 2) tympanometry to assess the condition of the middle ear. The indication for CI operation according to the tympanometry data is the type of tympanogram "A", "As", "C", "Ad", "D" or "E". If the patient has a perforation of the tympanic membrane type "B";
- 3) acoustic reflexometry in order to confirm a high degree of hearing loss or deafness, as well as differentiation of cochlear and retrocochlear deafness. The indication for the cochlear implantation operation according to the acoustic reflexometry data is absence of registration of the acoustic reflex on both sides;
- 4) registration of the evoked otoacoustic emission in order to exclude the possible preservation of the Corti cells.

The result of the study "not registered" on both sides shall be the indication for cochlear implantation according to the data of evoked otoacoustic emission. In the event of auditory neuropathy, the test result is recorded;

5) registration of short-latency auditory evoked potentials, in order to confirm a high degree of hearing loss or deafness, as well as differentiation of cochlear and retrocochlear pathology.

Absence of visual detection of the V peak by 80 decibels or more on both sides shall be the indication for cochlear implantation operation according to the data of short-latency auditory evoked potentials;

6) registration of stationary auditory evoked potentials for a frequency-modulated tone of children in order to objectify the thresholds of auditory sensitivity.

Indication for the cochlear implantation operation according to the registration of stationary evoked potentials on a frequency-modulated tone shall be: bilateral severe hearing impairment (average loss of 71 - 90 decibels), bilateral deafness (average loss of 91 decibels or more);

7) tonal threshold audiometry for patients aged six years and older in order to determine the average values of the thresholds of auditory perception at frequencies of 500, 1000, 2000 and 4000 Hertz.

Indication for the cochlear implantation operation according to the data of tonal audiometry is severe bilateral hearing impairment (average loss of 71 - 90 decibels), bilateral deafness (average loss of 91 decibels or more);

8) tonal threshold audiometry in a free sound field with a hearing aid device for patients aged six years and older after measuring the output signal using the measurement method in a real ear in order to assess the effectiveness and adequacy of hearing aids fitting.

The indication for the cochlear implantation operation shall be presence of thresholds of auditory perception in a free sound field, exceeding 55 decibels at frequencies of 500 and 4000 Hertz;

9) speech audiometry with hearing devices for patients aged six years and older after measuring the output signal using the measurement method in the real ear in order to assess the effectiveness and adequacy of the hearing aid fitting.

The indication for the cochlear implantation operation according to the data of speech audiometry with hearing aids shall be recognition of less than 40% of polysyllabic words in the open selection.

76. X-ray examination (computed tomography of the pyramids of the temporal bones) shall be carried out to assess the patency of the cochlea and the state of the inner ear structures.

The indication for the cochlear implantation operation upon the X-ray examination shall be absence of cochleovestibular pathology, significant obstruction of the cochlear lumen, preventing implantation, as well as retrocochlear pathology.

77. Surdopedagogic examination shall be carried out to determine the time of hearing loss (late-deaf and early-deaf) and preserved speech habits.

Examination of late deaf children and adults (post-lingual) shall include:

- 1) assessment of auditory perception with and without a hearing device;
- 2) assessment of lip reading skills and auditory-visual perception of speech;
- 3) assessment of the state of oral speech;
- 4) assessment of reading and writing skills (for children, adolescents);
- 5) assessment of the prospects of using cochlear implantation system for auditory perception and speech development;
- 6) assessment of the adequacy of expectations of the results of cochlear implantation surgery on the part of the patient and his family.

Examination of early deaf (pre-lingual) children and adults shall include:

- 1) assessment of the formation of residual hearing with and without a hearing device;
- 2) assessment of the state of oral speech (for young children formation of pre-speech vocalizations);
 - 3) assessment of the language system and formation of reading skills;
 - 4) assessment of communication skills and communication methods;
 - 5) assessment of the formation of lip reading skills;
 - 6) assessment of cognitive skills;
 - 7) assessment of the formation of emotional-volitional sphere;
- 8) assessment of the presence of concomitant disorders affecting development of speech (mental retardation, specific speech disorders, impaired attention and memory);
- 9) assessment of whether parents and (or) legal representatives have experience in developing various skills in a child with hearing impairment;
- 10) assessment of the prospects of using a cochlear implantation system for auditory perception and speech development;
- 11) assessment of the adequacy of expectations of the results of cochlear implantation surgery on the part of the patient and his family.

The surdopedagogic examination shall result in the conclusion on the presence or absence of the surdopedagogic indications for cochlear implantation.

- 78. Logopedic examination shall include assessment of:
- 1) pre-speech development of young children voice activity, vocalizations (humming, cooing, babbling words, onomatopoeia);
- 2) the state of speech understanding: zero, situational, nominative, predicative, disarticulate levels of understanding;
- 3) development level of all speech aspects: articulation organs, sound pronunciation and syllable structure, vocabulary, grammatical structure, phrasal speech.

The logopedic examination shall result in the conclusion on the nature and degree of speech impairment (speech diagnosis).

- 79. Psychological examination shall include assessment of:
- 1) development level of cognitive activity: thinking, attention, memory, mental capacity;
- 2) potential intellectual capabilities, learning ability;

- 3) development level of communication activities, skills and methods of communication;
- 4) emotional-volitional and behavioral characteristics;
- 5) psychological readiness and motivation of the patient and his family for systematic and long-term auditory work;
- 6) adequacy of the expectations of the results of the operation of cochlear implantation on the part of the patient and his family.

The psychological examination shall result in the conclusion on the mental development level of the patient, motivational readiness of the patient, parents and (or) legal representatives of children for long-term hearing and speech work.

- 80. General and special clinical examinations shall be carried out for:
- 1) assessment of the patient's somatic condition;
- 2) assessment of the patient's psycho-neurological state.
- 81. General and special clinical examinations shall include:
- 1) consultation of a doctor specializing in otorhinolaryngology (adult or pediatric);
- 2) consultation of a doctor in the field of "pediatrics" or "therapy";
- 3) consultation of a doctor specializing in anesthesiology and resuscitation (adult or pediatric);
 - 4) consultation of a doctor specializing in neuropathology (adult or pediatric);
 - 5) electroencephalography;
- 6) consultation of a doctor specializing in "child psychiatry" (children over three years old) or "psychiatry".

For medical reasons, this list shall be expanded.

- 82. The cochlear implantation operation on children shall be carried out only with the written consent of the parents or legal representatives of the child to participate in the postoperative hearing and speech rehabilitation.
- 83. In the event that a patient identified as a candidate for cochlear implantation has a history of neuroinfection (serous or purulent meningitis), or confirmed by computer or magnetic resonance tomography cochlear ossification for any other reason, surgical treatment shall be performed out of turn.
- 84. If a patient, identified as a candidate for cochlear implantation has a history of neuroinfection (serous or purulent meningitis), or confirmed by computer or magnetic resonance tomography cochlear ossification for another reason, surgical treatment shall be performed on both ears at the same time, if possible.
- 85. In a healthcare organization that provides HTMC on hearing prosthetics with a cochlear implantation system, a waiting list shall be formed of patients in the sequence order of applications for this type of medical care, assigning a number and issuing a written notification within three working days after the decision is made.
- 86. Upon confirmation of the indications, the patient shall be referred to the clinic at the place of attachment for registration on the portal "Hospitalization Bureau".

- 87. In the event of a written refusal of the patient (if the patient is a child, then his parents or legal representatives) from the operation, the sequence number on the waiting list shall be lost.
- 88. If a patient preparing for cochlear implantation is found to have an acute inflammatory process or other relative contraindications (trauma, poisoning, etc.), the operation shall be postponed to a later date with the issuance of an information sheet.
- 89. The extract from the medical history issued to the patient shall indicate the date of the operation, the ear, the name of the manufacturer of the implantation system, the implant and the audio (speech) processor.
- 90. No earlier than 4 weeks after the operation, the audio (speech) processor of the cochlear implantation system shall be connected, with the tuning session performed and the patient's passport after cochlear implantation issued according to the form in Appendix 5 to these Rules.
- 91. The patient's passport after cochlear implantation shall be presented by the parents and filled out by specialists in accordance with the profile of their activity (after adjustment, classes with teachers, replacement or repair of the audio (speech) processor).
- 92. In the first year after the installation of the cochlear implantation system, the audio (speech) processor shall be adjusted at least 4 times, in the second year at least 2 times, in subsequent years as necessary for the patient.
- 93. Patients after hearing prosthetics with a cochlear implantation system shall be referred to specially organized correctional psychological and pedagogical work (correctional and developmental assistance) (training) in the general and special education organization through the territorial PMPC at the place of residence.
 - 94. Parents and (or) legal representatives of the child shall:
- 1) prepare the child for the procedure of connecting and tuning of the audio (speech) processor of the cochlear implantation system in accordance with the recommendations of the surdologist and sign language teacher;
- 2) provide optimal conditions to the child for the development of hearing, understanding and own speech;
 - 3) ensure constant use by the child of the audio (speech) processor;
 - 4) create a speech environment at home;
- 5) immediately contact the territorial PMPC at the place of residence for specially organized correctional psychological and pedagogical work (correctional and developmental assistance) (training) in the general and special education organization;
 - 6) ensure study of the guidelines for using the cochlear implantation system;
 - 7) timely contact organizations that provide warranty and post-warranty service;
 - 8) timely provide consumables (batteries, magnets, etc.) at their own expense.

9) timely provide the patient's passport to specialists after cochlear implantation for filling out at the tuning sessions of the audio (speech) processor, classes, when replacing or repairing the audio (speech) processor.

Chapter 6. Correctional- developmental training

95. Information on children received at screening, also on those referred for cochlear implantation, shall be directed to the territorial PMPC.

The PMPC at the place of residence shall determine the educational route of the children with hearing impairments after the hearing prosthetics aid.

96. Professionals of the educational institutions, parents (legal representatives) of the child shall ensure that children after hearing prosthetics constantly use the hearing device, audio (speech) processor during their entire stay in the educational institution, as well as at home, except for sleeping and bathing.

Appendix 1 to the Rules for providing audiological care to the population of the Republic of Kazakhstan

Equipment for audiological center or department (office)

No	Name of the functional unit and equipment set	Number of pieces
Εq	uipment for testing hearing	
1.	Diagnostic audiometer for tonal threshold audiometry, game audiometry with software for creating a patient databank	2
2.	Clinical audiometer for tonal threshold and supra-threshold audiometry, high-frequency audiometry, free sound field audiometry, speech audiometry, pediatric test, with a set of speakers and software for creating a patient databank	2
3.	Middle ear impedance analyzer	2
4.	System for recording auditory evoked potentials (SAEP) and auditory potentials on a frequency modulated tone (ASSR) with an otoacoustic emission recording module	2
5.	Otoacoustic emission recording device or apparatus or system (TEOAE, DPOAE)	2
6.	A device or apparatus for screening hearing by recording otoacoustic emissions (TEOAE, DPOAE) and auditory evoked potentials (SAEP)	2
7.	System for vestibulometry (videonystagmography or electronystagmography)	1
8.	Equipment (device) for impulse test	1
9.	Hearing aid analyzer (2CC camera for checking the output level of hearing aids signal or RECD)	1
10	Programmers with software for tuning audio (speech) processors of cochlear implantation systems, middle ear implantation systems, bone conduction from manufacturers	1 pc. from each manufacturer to each doctor
11	Hearing aid fitting programmer with software from different hearing aid manufacturers	1

12	Desktop computer with printer (monitor, keyboard, computer mouse)	2
13	Laptop computer	1
Eq	uipment for hearing prosthetics office	
1.	Clinical or diagnostic audiometer for tonal threshold audiometry, free sound field audiometry, speech audiometry with software for creating a patient databank	1
2.	System for fitting and tuning hearing aids with software from different hearing aids manufacturers	1
3.	Hearing aid analyzer (2CC camera for checking the output level of hearing aids signal or RECD)	1
4.	Programmers with software for tuning audio (speech) processors of cochlear implantation systems, middle ear implantation systems, bone conduction from manufacturers	1 pc. from each manufacturer
5.	Hearing aid fitting programmer with software from different hearing aid manufacturers	1
6.	Desktop computer with printer (monitor, keyboard, computer mouse)	2
7.	Laptop computer	1
8.	Video otoscope	1
9.	Otoscope	1
То	ol set	
1.	General medical set	1
2.	Otorhinolaryngologist tool kit	1
3.	Video otoscope	1
4.	Otoscope	1
5.	Stationary bactericidal irradiator	1
6.	Storage chamber for sterile instruments	1
Eq	uipment for sign language teacher's room	
1.	Computer table with drawer unit	1
2.	Semi-soft chair	2
3.	Filing cabinet	2
4.	Magnetic and cork board	1
5.	System unit, monitor, acoustic system, telephone and microphone headset, network filter, uninterruptible power supply, multifunctional device, keyboard, mouse, modem	1
6.	Children table	2
7.	Children chair	4
8.	Orthopedic chair (size - for height from 90 to 115 cm)	1
9.	Orthopedic chair (size - for height from 115 to 160 cm)	1
10	Rug	1
11	A set for psychological and pedagogical examination of children with hearing impairment	1
12	Musical toy	2
13	Sounding toy	2

14	A set of toys for practicing motor response to a sound signal	2
15	A set of subject pictures	2
16	Hearing-speech trainer for development of auditory perception and formation of sound pronunciation for individual hearing-speech rehabilitation	1
17	Personal computer-based trainer for development of sound-pronunciation and lexical-grammatical aspects of speech	1
18	Speech trainer for learning and development of elementary speech communication	2
19	Multimedia complex for correction of oral speech disorders	1
20	A set of computer correctional and educational games and programs	1
21	Wireless classroom to ensure the quality of hearing and speech rehabilitation for learners using hearing aids and learners with cochlear implants	1
22	Personal FM system	2
23	Audio loop	1
24	Table game or toy on vocabulary topics	30
25	Visual-didactic material	30
26	Tactile-developing desktop panels	10
27	Tactile-developing wall panels	10
28	Interactive sound bars	4
29	Panel with musical instruments	1
30	Music and game table	1
31	Logopedic spatula	5
32	Logopedic guiding probes (set)	2
33	Logopedic massage probes (set)	2
34	Logopedic auxiliary probes (set)	2
35	Sterilizer or container for disinfection of probes	1
36	Methodical literature	1
Eq	uipment for logopaedist's office	
1.	Computer table with drawer unit	1

2.	Semi-soft chair	2
3.	Filing cabinet	2
4.	Magnetic or cork board	1
5.	System unit, monitor, acoustic system, telephone and microphone headset, network filter, uninterruptible power supply, multifunctional device, keyboard, mouse, modem	1
6.	Children table	2
7.	Children chair	4
8.	Rug	1
9.	Orthopedic chair (size - for height from 90 to 115 cm)	1
10	Orthopedic chair (size - for height from 115 to 160 cm)	1
11	Massage couch for children with musculoskeletal disorders, adjustable	1
12	Table-desk for children with musculoskeletal disorders	1
13	Logopedic table-desk with a mirror	1
14	Wall mirror for group speech therapy classes	1
15	Mirror for individual speech therapy classes	4
16	Weights (weighing 500 gr., 1 kg., 2 kg.)	3
17	Logopedic spatula	5
18	Logopedic guiding probes (set)	2
19	Logopedic massage probes (set)	2
20	Logopedic auxiliary probes (set)	2
21	Sterilizer or container for disinfection of probes	1
22	Music center	1
23	Multimedia complex for correction of oral speech disorders	1
24	A set of computer correctional and educational games and programs	1
25	Personal computer-based trainer for development of sound-pronunciation and lexical-grammatical aspects of speech	1
26	Speech trainer for learning and development of elementary speech communication	2
27	Table game or toy on vocabulary topics	20

28	Visual-didactic material	30
29	Tactile-developing desktop panels	10
30	Tactile-developing wall panels	10
31	Wall bactericidal irradiator	1
32	Methodical literature and teachware	1
Εq	uipment for psychologist's room	
1.	Computer table with drawer unit	1
2.	Semi-soft chair	1
3.	Filing cabinet	1
4.	Magnetic and cork board	1
5.	System unit, monitor, acoustic system, telephone and microphone headset, network filter, uninterruptible power supply, multifunctional device, keyboard, mouse, modem	1
6.	Children table	1
7.	Children chair	1
8.	Orthopedic chair (size - for height from 90 to 115 cm)	1
9.	Orthopedic chair (size - for height from 115 to 160 cm)	1
10	Sofa	1
11	Soft ottoman	1
12	Rug	1
13	Wall mirror	1
14	DVD-player	1
15	Wall bactericidal irradiator	1
16	Set for psychological and pedagogical examination of children with hearing impairment	1
17	Table game or toy for developing play activity	1
18	Incentive visual-didactic material	1
19	Relief stimulus visual-didactic material	1
20	Speech trainer for learning and development of elementary speech communication	1
21	Methodical literature	1
Fa	uipment for phonopaedist's room	1

1.	Computer table with drawer unit	1
2.	Semi-soft chair	2
3.	Filing cabinet	2
4.	Magnetic and cork board	1
5.	System unit, monitor, acoustic system, telephone and microphone headset, network filter, uninterruptible power supply, multifunctional device, keyboard, mouse, modem	1
6.	Children table	2
7.	Children chair	4
8.	Rug	1
9.	Orthopedic chair (size - for height from 90 to 115 cm)	1
10	Orthopedic chair (size - for height from 115 to 160 cm)	1
11	Table-desk for children with musculoskeletal disorders	1
12	Logopedic table-desk with a mirror	1
13	Wall mirror for group classes	1
14	Mirror for individual classes	4
15	Music center	1
16	Piano	1
17	Multimedia complex for correction of oral speech disorders	1
18	A set of computer correctional and educational games and programs	1
19	Speech trainer for learning and development of elementary speech communication	2
20	Table game or toy on vocabulary topics	20
21	Visual-didactic material	30
22	Tactile-developing desktop panels	10
23	Tactile-developing wall panels	10
24	Interactive sound bars	4
25	Panel with musical instruments	1
26	Music and game table	1
27	Wall bactericidal irradiator	1

Appendix 2 to the Rules for providing audiological care to the population of the Republic of Kazakhstan

Staff and staffing standards of surdology centers or departments (offices)

No	Position	Rate*
1.	head of the surdology center / department (office), surdologist	1,0
2.	surdologist for children	1,0
3.	surdologist for adult population	1,0
4.	logopaedist	1,0
5.	phonopaedist	1,0
6.	psychologist	1,0
7.	sign language teacher	1,0
8.	hearing prosthetist (acoustician)	1,0
9.	medical nurse (adult reception)	1,0
10.	medical nurse (children reception)	1,0
11.	orderly	1,0
12.	record keeper	1,0

^{*}The rates may change upwards

Staff and staffing standards of hearing prosthetics offices

No	Position	Rate*
1.	The head of the office, surdologist	1,0
2.	sign language teacher	1,0
3.	hearing prosthetist (acoustician)	1,0
4.	technician making in-the-ear hearing devices, earmolds	1,0
5.	medical nurse	1,0
6.	orderly	1,0
7.	record keeper	1,0

^{*} The rates may change upwards

Appendix3 to the Rules for providing audiological care to the population of the Republic of Kazakhstan

Premises for surdology center and department (office)

1) waiting room for patients;

- 2) record room;
- 3) room of the head of the office;
- 4) surdologist's room;
- 5) tonal and game audiometry room;
- 6) room for speech audiometry, audiometry in a free sound field and clarifying the operating mode of the hearing device;
- 7) functional diagnostics room (impedance measurement, registration of auditory evoked potentials, otoacoustic emission, vestibulometry);
 - 8) tuning room of audio (speech) processors of cochlear implantation systems;
 - 9) sign language teacher's room;
 - 10) logopaedist 's room;
 - 11) psychologist's room;
 - 12) utility room.

Premises for hearing prosthetics rooms

- 1) waiting room for patients;
- 2) record room;
- 3) the head surdologist's office;
- 4) room for tonal and game audiometry; room for speech audiometry, audiometry in a free sound field;
- 5) room for selection, adjustment and clarification of hearing device operating mode, adjustment of the audio (speech) processors of implantation systems;
 - 6) sign language teacher's room;
 - 7) utility room.

Appendix 4 to the Rules for providing audiological care to the population of the Republic of Kazakhstan

Time allotment per patient for surdological care

Reception of specialist:	i n minutes
Consultation of surdologist for adult population	30
Consultation of surdologist for children	30
Consultation of sign language teacher	30
Consultation of logopaedist	30
Consultation of phonopaedist	30
Consultation of hearing prosthetist	30
Consultation of psychologist	30
Procedures and manipulations:	

Otoscopy	15
Tone threshold audiometry	30
Tone audiometry in a free sound field	30
Game audiometry	40
Supra-threshold audiometry	30
Speech audiometry	40
Tympanometry	30
Acoustic reflex	20
Test of acoustic reflex decay	20
Test of auditory tube function	30
Promontory test	40
Telemetry of auditory nerve response	20
Telemetry of auditory implant electrode impedance	20
Recording of distortion product otoacoustic emission	30
Recording of short-latency auditory evoked potentials (SAEP)	60
Recording of stationary evoked potential on modulated tone (ASSR)	60
Checking the output level of hearing aids signal or RECD	30
Individual classes (sign language teacher or logopaedist or phonopaedist)	40
Audiological examination of hearing and speech condition	30
Logopedic examination of speech condition	30
Connection of audio- (speech) processor by surdologist	40
Adjustment of audio- (speech) processor by surdologist	40
Adjustment of hearing device by surdologist	40
Adjustment of audio- (speech) processor by hearing prosthetist	40
Selection and adjustment of hearing device by hearing prosthetist	40
Examination by surdologist of the audio (speech processor) settings of cochlear implantation systems, middle ear, and or bone conduction	30
Examination by a sign language teacher of the hearing device adjustment	30

Appendix 5 to the Rules for providing audiological care to the population of the Republic of Kazakhstan Form

Passport of the patient after cochlear implantation

1. Full name of the child					
2. Date of birth					
3. Age at the time of surgery					
4. Place of residence: region					
district	_city (village)				
street	house No.	building			

	apartment		
	Home phone		
	Mobile phone	_	
	5. Data on the child's parents or legal re		
	phone		
	6. Medical history:		
	1) Age, when hearing impairment was n	noticed	
	2) Age, when the diagnosis was first ma	nde	
	3) Assumed reason of hearing impairme		
	4) Record of earlier meningitis / neuroin		
	5) Use of hearing aid before operation (i	indicating time of wearing hearing aid)	
	6) Place of study (for organized children	n)	
	7. Cochlear implantation system:		
	1) Name of the cochlear implantation sy	ystem manufacturer	
	2) Name of the cochlear implant		
	3) Type of electrode		
	4) Name of the speech processor		_
	5) Implantation side: left / right / bilatera		
	6) Presence of cochlea ossification		
	7) Specificity of the operation		
	8) Date of the operation	Date of connection	
	9) Place of operation		
	10) Speech processor complete set:		
No	Name	Number	
1	2	3	
	8. Adjustment or tuning session of the sp		
	1) Date of adjustment or tuning session		
	2) Name of the organization		
	3) Full name of the doctor		
	4) Full name of the sign language teacher		
	5) Strategy		
	6) Programs		
		nce)	
	9. Postoperative hearing and speech care	e:	
	1) Date		
	2) Name of the organization and full nar	me of the teacher	

10. Postoperative technical sup	port:
1) Date of replacement or repair	ir of speech processor
2) Name of the organization th	at replaces or repairs the speech processor

© 2012. «Institute of legislation and legal information of the Republic of Kazakhstan» of the Ministry of Justice of the Republic of Kazakhstan